

UNCLASSIFIED

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AUTHORITY
USNWC ltr, 30 Apr 1974

THIS PAGE IS UNCLASSIFIED

1. COMPONENT/PART NAME PER GENERIC CODE Modules, Capacitor-Resistor		2. PROGRAM OR WEAPON SYSTEM YA1M-9H		ACCESS NUMBER D7913	
4. ORIGINATOR'S REPORT TITLE Qualification of detector and sync. filter modules (A-3).		5. ORIGINATOR'S REPORT NO. Q-1487 Rev. A		3. DAY MO. YR. 18 11 71	
		6. TEST TYPE, ETC. 1 1# Qualification		TEST COMPL. 8 12 71 REPT. COMPL. 8 12 71	

7. THIS TEST (SUPERSEDES) (SUPPLEMENTS) REPORT NO: N/A

8A. PART TYPE, SIZE, RATING, LOT, ETC.	9. VENDOR & H4 CODE NO	10. VENDOR PART NO.	11. IND./GOV STD NO	12. TOTAL TESTED
1. Detector and sync.	Raytheon 05030	2606038 Rev.	2606038 Rev.	14
2. Filter Modules (A-3)		(12) 38p.1		
3. Encapsulated				
4. 15/N00119-70-C-02691				

13. INTERNAL SPECS. ETC. REQ'D TO UTILIZE REPT. ENCL		SENT WITH REPORT NO.		14. MIL. SPECS /STDs REFERENCED IN 15C	
A	2606038 Rev. -E	X		D	MIL-STD-202
B	XAS-1846		530.00.00.00-X7-01	E	
C				F	

15A. TEST OR ENVIRONMENT	C PER SPEC	D SPEC. PARAGRAPH/METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS	F NO TESTED	G NO FAILED
ALL GROUP I					
Vis. and Mech Inspection	B	4.14.1	Workmanship, materials, processes, dimensions, interchangeability and markings	4	0
ALL Electrical Characteristics	A	Sheets 1, 4 Tables I, II	(10) C / Bridge	4	0
Resistance			Pre-Environ. 0.1 OHM max. Post-Environ. 0.2 OHM max.	4	0
Supply Current (5)			Pre-Environ. 10 MADC max. Post-Environ. 15 MADC max.	4	0
Supply Current (29)			Pre-Environ. 30 MADC max. Post-Environ. 35 MADC max.	4	0
Supply Current (19)			Pre-Environ. 10 MADC max. Post-Environ. 15 MADC max.	4	0
Supply Current (35)			Pre-Environ. 10 MADC max. Post-Environ. 15 MADC max.	4	0

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN:

Test data barely legible and not suitable for microfilming; available on a loan basis from submitting participant (X7).

17. ENVIRONMENTAL EXPOSURE CODES

BMST/UVYZ

18 APR 1972

18. TESTED BEYOND VENDOR CATALOG SPECIFICATIONS	YES <input type="checkbox"/>	19. VENDOR INFORMED BY COPY OF REPORT	X	20. SIGNED Demetrios Kostopoulos	21. CONTRACTOR NWC/CL	SUBCONTRACTOR Raytheon
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REPRODUCTION OR DISPLAY OF THIS MATERIAL FOR SALES OR PUBLICITY PURPOSES IS PROHIBITED.

38

403 019✓

001

ACCESSION FOR	
RTIS	WATER TIGHT <input checked="" type="checkbox"/>
POC	DATE 5/20/77 <input checked="" type="checkbox"/>
DISCUSSION TO	
ADJUSTMENT	
BY	
COUNCIL	
B	

ISA	TEST OR ENVIRONMENT	C PER SPEC	D SPEC. PARAGRAPH/ METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS		F NO TESTED	G NO FAILURES
<input type="checkbox"/>	Aud. Amp. Output			Pre-Environ. 8.0 \pm 0.75 VRMS	Post-Environ. 8.0 \pm 1.0 VRMS	4	0
<input type="checkbox"/>	Phase Adjust Difference			Pre-Environ. 14 \pm 5 KOHM	Post-Environ. 14 \pm 5 KOHM	4	0
<input type="checkbox"/>	Det. Ampl. Output			Pre-Environ. 5.75 \pm 3.0 VRMS	Post-Environ. 5.75 \pm 3.0 VRMS	4	0
<input type="checkbox"/>	Sync Filter Output			Pre-Environ. 0.43 \pm 0.05	Post-Environ. 0.43 \pm 0.07 VRMS	4	0
<input type="checkbox"/>	Sync Filter Bandwidth			Pre-Environ. 9 \pm 2 Hz.	Post-Environ. 9 \pm 3 Hz.	4	0
<input type="checkbox"/>	R/L Output			Pre-Environ. 0.75 \pm 0.10 VRMS	Post-Environ. 0.75 \pm 0.20 VRMS	4	0
<input type="checkbox"/>	U/D Output			Pre-Environ. 0.75 \pm 0.10 VRMS	Post-Environ. 0.75 \pm 0.20 VRMS	4	0
<input type="checkbox"/>	R/L Switch- ing Symetry			Pre-Environ. 0.2 MSEC max.	Post-Environ. 0.4 MSEC max.	4	0
<input type="checkbox"/>	U/D Switch- ing Symetry			Pre-Environ. 0.2 MSEC max.	Post-Environ. 0.4 MSEC max.	4	0
<input type="checkbox"/>	Sync Filter Noise			Pre-Environ. 10 MVRMS max.	Post-Environ. 15 MVRMS max.	4	0
<input type="checkbox"/>	Seam Circuit Voltage			Pre-Environ. 2.35 \pm 0.15 VRMS	Post-Environ. 2.35 \pm 0.25 VRMS	4	0
<input type="checkbox"/>	Seam Circuit Phase			Pre-Environ. 12.0 \pm 5°	Post-Environ. 120 \pm 6°	4	0
ALL	GROUP II						
ALL	Thermal Shock	D	Method 107 Condition B	-65°, 25°, 125°, 25°C, 5 cycles; followed by electrical character- istics		4	0
ALL							
ALL	Humidity Bake	D	Method 103 Condition B	104°F, 24 hrs; followed by electrical characteristics		4	0
ALL	Humidity	D	Method 103 Condition B	40°C, 90 to 95% RH, 90 hrs.; followed by electrical character- istics		4	0
ALL	Low Temperature	B	4.12.2	-55°C, 15% RH, 4 hrs.; followed by electrical characteristics		4	0
ALL	High Temperature	B	4.12.1	+125°C, 4 hrs; followed by electrical characteristics		4	0

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN:

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Test and Evaluation; 11 SEP 1972 other requests
for this document

Naval Fleet Missile Systems
Analysis & Evaluation Group (Code 862)
Gidep office. Corona, Calif. 91720

21. REPT. NO.
530.34.00.00-X7-07

15A ITEM	TEST OR ENVIRONMENT	C PER SPEC	D SPEC. PARAGRAPH/ METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS	F NO. TESTED	G NO. FAILED
ALL	Impact Shock	B	4.12.7	30 impact shocks, 50 gravity units each, 5 shocks in opposite directions; followed by electrical characteristics	4	0
ALL	Vibration	D	Method 204 Condition B	15G (peak), 10 to 2,000 Hz, 20 min, 12 times (total of 36 times); followed by electrical characteristics	4	0
ALL	Visual External	B	4.14.1	Workmanship, materials, processes, dimensions, interchangeability and markings	4	0
ALL	GROUP III					
ALL	Terminal Strength	B	4.10.5	Axial pull of 5 lbs. for 10 sec., 90 degree bends; job load by electrical characteristics	4	0
ALL	Vis. & Mech. Inspection	B	4.14.1	Same as Group I; followed by electrical characteristics	4	0
ALL	Res. to Solder Heat	D	Method 210 Condition B	260°C, 10 sec.; followed by electrical characteristics	2	0
ALL	Storage	B	4.12.3	-65° and +125°C for 96 hrs. each; followed by electrical characteristics, humidity bake, electrical characteristics, humidity electrical characteristics, visual external, terminal strength, electrical characteristics	4	0
ALL	Flame Resistance			Self-extinguishing or not support combustion for more than 60 sec.; followed by visual and mechanical examination, electrical characteristics	1	0
ALL	GROUP IV					
	Life first Profile	D	Method 108 Condition C	96 hrs; followed by electrical characteristics	4	0

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN:

21. REPT. NO:
530.34.00.00-X7-07

NOTICES PAGE

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REPORT: Q-1427
PART NUMBER: 2606038 Rev.-

PART NAME: Det. & Sync. Filter
Module (A-3)
PROGRAM: Solid State Sidewinder
VENDOR: Raytheon Co. - Lowell, Mass.



75-292-P1 (9/70)

CUSTOMER
REPORT NO. Q-1427 Rev. A

RAYTHEON
REPORT NO. Q-1427 Rev. A

REVISION _____

REPORT OF TEST ON: Qualification of (14) Detector and Sync.
Filter modules (A-3) P/N 2606038 Rev. — submitted by
Raytheon Company - Lowell, Massachusetts.

TEST PERFORMED BY

Raytheon Company

TEST AUTHORIZED BY

DCASO

CONTRACT NO.

N-000-19-70-C-0269

RAYTHEON COMPANY
MISSILE SYSTEMS DIVISION
LOWELL PLANT



76-202-P2 (9/70)

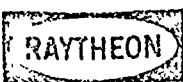
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75-292-P4 (9/70)

VENDOR QUALIFICATION TEST REPORT

CUSTOMER
REPORT NO. Q-1427 Rev. ARAYTHEON
REPORT NO. Q-1427 Rev. A

REVISION _____

REPORT OF TEST ON: Qualification of (14) detector and sync.
filter modules (A-3) P/N 2606038 Rev. — submitted by
Raytheon Company - Lowell, Massachusetts.

TEST PERFORMED BY

Raytheon Company
TEST AUTHORIZED BYDCASO

CONTRACT NO.

N-000-19-70-C-0269

	DATE	SIGNATURE
TEST INITIATED	9-17-71	
TEST COMPLETED	11-18-71	
REPORT WRITTEN BY		C. Bridge
TECHNICIAN		
TEST ENGINEER	2/2/72	John T. Henry
PRODUCT ENGRG. SECTION HEAD	2/7/72	2. Calderwood
PROJECT OFFICE	2/7/72	W. H. H. H.
RELIABILITY ENGRG. MANAGER	2/7/72	Charles J. H. H.
RELIABILITY ENGRG. SUPERVISOR	1/25/72	Boyd Corley
WITNESSED BY		
CUSTOMER		
FINAL RELEASE		



75-202-P5 (9/70)

SUMMARY SHEET

1. COMPONENT/PART NAME PER GENERIC CODE Detector and Sync. Filter Mod.	2. PROGRAM OR WEAPON SYSTEM YAIM-9H	3. TEST COMPLETE REPORT COMPLETE	DAY 18 8	MO. 11 12	YEAR 71 71
4. RAYTHEON REPORT TITLE Vendor Qual. Test Report	5. RAYTHEON REPORT NO. Q-1427 Rev. A	6. TEST TYPE Qualification			

7. THIS TEST ☐ SUPERSEDES ☐ SUPPLEMENTS REPORT NO. N/A

B ITEM	8A. PART TYPE, SIZE, RATING, LOT, ETC.	9. VENDOR	10. VENDOR PART NO.	11. IND./GOVT. STANDARD NO.	12. TOTAL TESTED
1	(A-3) Detector & Sync. Fil	Raytheon	Rev. - 2606038	2606038 Rev	14
2					
3					
4					

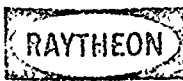
13. INTERNAL SPECS, ETC. REQUIRED TO UTILIZE REPORT	ENCL.	SENT WITH REPORT NO.	14. MIL SPECS/STANDARDS REFERENCED IN 15C
A 2606038 Rev. -	No	N/A	D XAS-1846
B			E
C			F

B ITEM	15A. TEST OR ENVIRONMENT	C PER SPEC.	D SPEC. PARAGRAPH/ METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS	F NO. TESTED	G NO. FAILED
1	Vis.&Mech.Insp.	14	4.14.1	3.9	4	0
1	Electrical	14	4.11	3.4	4	0
1	Thermal Shock	14	4.12.4	3.6.4	4	0
1	Electrical	14	4.11	3.4	4	0
1	Humidity Bake	14	4.12.5	3.6.5	4	0
1	Electrical	14	4.11	3.4	4	0

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN

17. TESTED BEYOND VENDOR CATALOG SPECIFICATIONS <input type="checkbox"/> YES	18. VENDOR INFORMED OF TEST RESULTS BY <input type="checkbox"/> LETTER <input checked="" type="checkbox"/> COPY OF REPORT <input type="checkbox"/> ORAL	
	19. SIGNED C. Bridge	20. CONTRACTOR Raytheon Co.
		SUBCONTRACTOR None

21. REPORT NO.
Q-1427 Rev. A



75-29-106 (9/70)

SUMMARY SHEET (Continuation Page)

B ITEM	8A. PART TYPE, SIZE, RATING, LOT, ETC.	9. VENDOR	10. VENDOR PART NO.	11. IND./GOVT. STANDARD NO.	12. TOTAL TESTED
5					
6					
7					
8					

B ITEM	15A. TEST OR ENVIRONMENT	C PER SPEC.	D SPEC. PARAGRAPH/ METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS	F NO. TESTED	G NO. FAILED
1	Humidity	14	4.12.5	3.6.5	4	0
1	Electrical	14	4.11	3.4	4	0
1	Low Temperature	14	4.12.2	3.6.2	4	0
1	Electrical	14	4.11	3.4	4	0
1	High Temperature	14	4.12.1	3.6.1	4	0
1	Electrical	14	4.11	3.4	4	0
1	Impact Shock	14	4.12.7	3.6.7	4	0
1	Electrical	14	4.11	3.4	4	0

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN

21. REPORT NO.
Q-1427 Rev. A



SUMMARY SHEET (Continuation Page)

75-292-P6 (9/70)

B ITEM	8A. PART TYPE, SIZE, RATING, LOT, ETC.	9. VENDOR	10. VENDOR PART NO.	11. IND./GOVT. STANDARD NO.	12. TOTAL TESTED
5					
6					
7					
8					

B ITEM	15A. TEST OR ENVIRONMENT	C PER SPEC.	D SPEC. PARAGRAPH/ METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS	F NO. TESTED	G NO. FAILED
1	Vibration	14	4.12.6	3.6.6	4	*
1	Electrical	14	4.11	3.4	4	0
1	Visual Insp.	14	4.14.1	3.3, 3.7, 3.8, 3.9	4	0
1	Terminal Strength	14	4.10.5	3.5.3	4	0
1	Electrical	14	4.11	3.4	4	0
1	End of Group II					**

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN

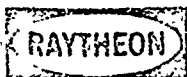
- * Mounting flange broke off during installation of Ser. #0226 into vibration fixture. See incompatibility notice #0137.

The flange was damaged during removal of module from the impact shock fixture. A screw used to hold the fixture to the shock machine working head, was turned out under the module, which was still held down by its flange screws, jacking the module up against its flange screw and cracking the flange.

The broken flange was repaired, and module continued in qualification.

- ** Four modules successfully passed the requirements of Q-1427 Group II tests.

21. REPORT NO.
Q-1427 Rev. A.



75-292-P6 (9/70)

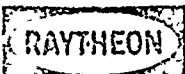
SUMMARY SHEET (Continuation Page)

B ITEM	8A. PART TYPE, SIZE, RATING, LOT, ETC.	9. VENDOR	10. VENDOR PART NO.	11. IND./GOVT STANDARD NO.	12 TOTAL TESTED
5					
6					
7					
8					

B ITEM	15A. TEST OR ENVIRONMENT	C PER SPEC.	D SPEC. PARAGRAPH/ METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS	F NO. TESTED	G NO. FAILED
1	Vis.&Mech. Insp.	14	4.14.1	3.9	4	0
1	Electrical	14	4.11	3.4	4	0
1	Heat Res.to Solder	14	4.10.4	3.5.2	2	0
1	Storage	14	4.12.3	3.6.3	4	0
1	Electrical	14	4.11	3.4	4	0
1	Humidity Bake	14	4.12.5	3.6.5	4	0
1	Electrical	14	4.11	3.4	4	0
1	Humidity	14	4.12.5	3.6.5	4	0

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN

21. REPORT NO.
Q-1427 Rev. A



SUMMARY SHEET (Continuation Page)

73-292-P6 19/701

B ITEM	8A. PART TYPE, SIZE, RATING, LOT, ETC.	9. VENDOR	10. VENDOR PART NO.	11. IND./GOVT. STANDARD NO.	12. TOTAL TESTED
5					
6					
7					
8					

B ITEM	15A. TEST OR ENVIRONMENT	C PER SPEC.	D SPEC. PARAGRAPH/ METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS	F NO. TESTED	G NO. FAILED
1	Electrical	14	4.11	3.4	4	0
1	Vis. Inspection	14	4.14.1	3.3, 3.7, 3.8, 3.9	4	0
1	Terminal Strength	14	4.10.5	3.5.3	4	0
1	Electrical	14	4.11	3.4	4	0
1	Flame Resistance	14	4.12.8	3.6.8	1	0
	End of Group III					*

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN

- * Four modules successfully passed the requirements of Q-1427 Group III tests.

21. REPORT NO.
Q-1427 Rev. A



75-202-P6 (9/70)

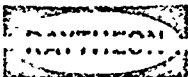
SUMMARY SHEET (Continuation Page)

8 ITEM	8A. PART TYPE, SIZE, RATING, LOT, ETC.	9. VENDOR	10. VENDOR PART NO.	11. IND./GOVT. STANDARD NO.	12. TOTAL TESTED
5					
6					
7					
8					

B ITEM	15A. TEST OR ENVIRONMENT	C PER SPEC.	D SPEC. PARAGRAPH/ METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS	F NO. TESTED	G NO. FAILED
1	Vis.&Mech.Insp.	14	4.14.1	3.9	4	0
1	Electrical	14	4.11	3.4	4	0
1	Profile 1st Life Test	14	4.14.3	3.6.9	4	0
1	Electrical	14	4.11	3.4	4	0
1	Profile 2nd Life Test	14	4.14.3	3.6.9	4	0
1	Electrical	14	4.11	3.4	4	0
1	Profile 3rd Life Test	14	4.14.3	3.6.9	4	0
1	Electrical	14	4.11	3.4	4	0

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN

21. REPORT NO.
Q-1427 Rev. A



75-292-P6 (9/70)

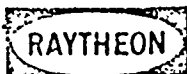
SUMMARY SHEET (Continuation Page)

B ITEM	8A. PART TYPE, SIZE, RATING, LOT, ETC.	9. VENDOR	10. VENDOR PART NO.	11. IND./GOVT. STANDARD NO.	12. TOTAL TESTED
5					
6					
7					
8					

B ITEM	15A. TEST OR ENVIRONMENT	C PER SPEC.	D SPEC. PARAGRAPH/ METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS	F NO. TESTED	G NO. FAILED
1	4th Life Test Profile	14	4.14.3	3.6.9	4	0
1	Electrical	14	4.11	3.4	4	0
1	5th Life Test Profile	14	4.14.3	3.6.9	4	0
1	Electrical	14	4.11	3.4	4	0
1	6th Life Test Profile	14	4.14.3	3.6.9	4	0
1	Electrical	14	4.11	3.4	4	0
1	Vis. Inspection Strength	14	4.14.1	3.3, 3.7, 3.8, 3.9	4	0
1	Terminal	14	4.10.5	3.5.3	4	0

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN

21. REPORT NO.
Q-1427 Rev. A



SUMMARY SHEET (Continuation Page)

8 ITEM	8A. PART TYPE, SIZE, RATING, LOT, ETC.	9. VENDOR	10. VENDOR PART NO.	11. IND. GOVT. STANDARD NO.	12. TOTAL TESTED
5					
6					
7					
8					

8 ITEM	15A. TEST OR ENVIRONMENT	C PER SPEC.	D SPEC. PARAGRAPH METHOD/CONDITION	E TEST LEVELS, DURATION AND OTHER DETAILS	F NO. TESTED	G NO. FAILED
1	Electrical	14	4.11	3.4	4	0
1	Vis. Inspec.(Int)	14	4.14.2	3.3, 3.7, 3.8, 3.9	2*	0
	End of Grp. IV				**	
	End of Qual.				***	

16. SUMMARY OF REPORT, NATURE OF FAILURES AND CORRECTIVE ACTIONS TAKEN

- * Two unpotted modules used for visual standards.
- ** Four modules successfully passed the requirements of Q-1427 Group IV tests.
- *** (14) Detector and sync. filter modules (A-3) P/N 2606038 Rev. - have successfully passed the requirements of Q-1427, therefore Raytheon Company Lowell, Mass. is considered to be a qualified source of these modules.

21. PLOT/FIG. NO.
Q-1427, REV. A



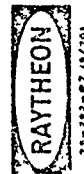
TEST SUMMARY SHEET

ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE NUMBERS	
Detector & Sync. Filter Module A-3		Raytheon Company		2606038 (Rev. -)		11-18-71		FROM	
SPEC.		MANUFACTURER		MANUFACTURER'S TYPE		DATE TEST BEGUN		TO	
2606038 Rev. -		Raytheon Company		2606038 (Rev. -)		8-3-71		N/A N/A	
LINE	TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN. MAX.	NO. SAMPLES TESTED	PASSED	REMARKS
1	I	32		Visual & Mechanical Inspection	3.9	N/A	4	4	Four modules submitted to Group II tests Ser. #0207, 0226, 0236, 0242.
2	I	37		Electrical Test ELEC. PARAMETERS	3.4 Limits	Listed Below	4	4	
				1 Supply Current	10 MADC Max.	2.9			
				2 Supply Current	30 MADC Max.	13.6			
				3 Supply Current	10 MADC Max.	7.5			
				4 Supply Current	10 MADC Max.	7.7			
				5 Det. Ampl. Gain	7.25 to 8.75 VRMS	8.1			
				6 Phase Adj. Diff.	9 to 19 K Ohms	14			
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	3.2			
				7 Sync. Filter Output	0.38 to 0.48 VRMS	3.32			
				8 Sync. Filter Bandwidth	7 to 11 HZ	0.432			
				9 R/L Output	0.65 to 0.85 VRMS	7.0			
				10 U/D Output	0.65 to 0.85 VRMS	0.77			
				11 R/L Sw. Symmetry	0.2 MS Max.	0.79			
				12 U/D Sw. Symmetry	0.2 MS Max.	0			
				13 Sync. Filter Noise	12 MW RMS Max.	0			
				14 Seam Circuit	2.20 to 2.50 VRMS	10.2			
				RES. PARAMETERS	0.1 Ohms Max.	2.33			
				1 Between Term. 7 & 12	Limits	0.043			
3	II	40		Thermal Shock	3.6.4	N/A	4	4	
4	II	41		Electrical Test ELEC. PARAMETERS	3.4 Limits	Listed Below	4	4	
				1 Supply Current	15 MADC Max.	3.0			
				2 Supply Current	35 MADC Max.	14.0			
				3 Supply Current	15 MADC Max.	7.5			
				4 Supply Current	15 MADC Max.	7.5			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.2			
				6 Phase Adj. Diff.	9 to 19 K Ohms	14.3			
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	3.17			
				7 Sync. Filter Output	0.36 to 0.50 VRMS	0.435			
				8 Sync. Filter Bandwidth	6 to 12 HZ	7.6			
				9 R/L Output	0.55 to 0.95 VRMS	0.78			
				10 U/D Output	0.55 to 0.95 VRMS	0.79			
				11 R/L Sw. Symmetry	0.4 MS Max.	0			
				12 U/D Sw. Symmetry	0.4 MS Max.	0			
				13 Sync. Filter Noise	17 MW RMS Max.	10.4			
				14 Seam Circuit	2.10 to 2.60 VRMS	2.34			
				RES. PARAMETERS	Limits	0.043			
				1 Between Term.	0.1 Ohms Max.	0.049			

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TEST SUMMARY SHEET



ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE NUMB RS	
SPEC.		MANUFACTURER		MANUFACTURER'S TYPE		DATE TEST BEGUN		FROM	
2606038 Rev. -		Raytheon Co.		2606038 Rev. -		11-18-71		N/A	
2606038 Rev. -		Raytheon Co.		2606038 Rev. -		8-3-71		N/A	
LINE	TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN. MAX.	NO. SAMPLES TESTED	PASSED	REMARKS
9	II	54		Low Temperature Test	3.6-2	N/A	4	4	
10	II	55		Electrical Test	3.4	15 MADC Max.	4	4	
				ELEC. PARAMETERS	LIMITS	3.3			
				1 Supply Current		14.0			
				2 Supply Current		7.9			
				3 Supply Current		7.9			
				4 Supply Current		8.1			
				5 Det. Ampl. Gain		14.6			
				6 Phase Adj. Diff.		8.1			
				6A Det. Ampl. Output		15.9			
				7 Sync. Filter Output		3.18			
				8 Sync. Filter Bandwidth		3.20			
				9 R/L Output		0.445			
				10 U/D Output		0.36 to 0.50 VRMS			
				11 U/D Sw. Symmetry		7.4			
				12 R/L Sw. Symmetry		7.5			
				13 Sync. Filter Noise		0.82			
				14 Seam Circuit		0.78			
				RES. PARAMETERS		0.78			
				1 Between Term.		0			
						0.4 MS Max.			
						0.4 MS Max.			
						17 MVRMS Max.			
						2.10 to 2.60 VRMS			
						0.1 Ohms Max.			
11	II	57		High Temperature Test	3.6-1	N/A			
12	II	58		Electrical Test	3.4	15 MADC Max.			
				ELEC. PARAMETERS	LIMITS	3.1			
				1 Supply Current		13.7			
				2 Supply Current		7.4			
				3 Supply Current		7.2			
				4 Supply Current		7.9			
				5 Det. Ampl. Gain		8.2			
				6 Phase Adj. Diff.		13.9			
				6A Det. Ampl. Output		14.5			
				7 Sync. Filter Output		3.28			
				8 Sync. Filter Bandwidth		0.435			
				9 R/L Output		7.4			
				10 U/D Output		0.76			
				11 R/L Sw. Symmetry		0.78			
				12 U/D Sw. Symmetry		0			
				13 Sync. Filter Noise		0			
				14 Seam Circuit		10.0			
				RES. PARAMETERS		2.35			
				1 Between term.		2.41			
						0.046			
						0.052			

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TEST SUMMARY SHEET

ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE N MBERS	
SPEC.		MANUFACTURER		MANUFACTURER'S TYPE		DATE TEST BEGUN		FROM TO	
Detector & Sync. Filter Module A-3		Raytheon Company		2606038 Rev. -		11-18-71		N/A N/A	
2606038 Rev. -		Raytheon Company		2606038 Rev. -		8-3-71		N/A N/A	
LINE	TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN. MAX.	NO. SAMPLES TESTED PASSED	REMARKS	
13	II	60		Impact Shock	3.6.7	N/A	4	4	Mounting flange broke off duri - installation of module, ser. #0226, into Vibration fixture. See incompatibility notice #0137
14	II	65		ELEC. PARAMETERS	3.4	Listed Below	4	4	
				1 Supply Current	15 MADC Max.	3.2			
				2 Supply Current	35 MADC Max.	14.0			
				3 Supply Current	15 MADC Max.	7.7			
				4 Supply Current	15 MADC Max.	7.7			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.1			
				6 Phase Adj. Diff.	9 to 19 K Ohms	14.9			
				7 Det. Ampl. Output	2.75 to 8.75 VRMS	3.11			
				8 Sync. Filter Output	0.36 to 0.50 VRMS	0.435			
				9 Sync. Filter Bandwidth	5 to 12 HZ	7.6			
				10 R/L Output	0.55 to 0.95 VRMS	0.79			
				11 U/D Output	0.55 to 0.95 VRMS	0.79			
				12 R/L Sw. Symetry	0.4 MS Max.	0			
				13 U/D Sw. Symetry	0.4 MS Max.	0			
				14 Sync. Filter Noise	17 MVRMS Max.	9.6			
				15 Seam Circuit	2.10 to 2.60 VRMS	2.33			
				RES. PARAMETERS	0.1 Ohms Max.	0.044			
				1 Between Term.	LIMITS	N/A	4	4	
15	II	68		Vibration	3.6.6	N/A	4	4	Mounting flange broke off duri - installation of module, ser. #0226, into Vibration fixture. See incompatibility notice #0137
16	II	69		ELEC. PARAMETERS	3.4	Listed Below	4	4	
				1 Supply Current	15 MADC Max.	3.3			
				2 Supply Current	35 MADC Max.	14.0			
				3 Supply Current	15 MADC Max.	7.4			
				4 Supply Current	15 MADC Max.	7.8			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.1			
				6 Phase Adj. Diff.	9 to 19 K Ohms	14.0			
				7 Det. Ampl. Output	2.75 to 8.75 VRMS	3.20			
				8 Sync. Filter Output	0.36 to 0.50 VRMS	0.438			
				9 Sync. Filter Bandwidth	5 to 12 HZ	7.5			
				10 R/L Output	0.55 to 0.95 VRMS	0.78			
				11 U/D Output	0.55 to 0.95 VRMS	0.79			
				12 R/L Sw. Symetry	0.4 MS Max.	0			
				13 U/D Sw. Symetry	0.4 MS Max.	0			
				14 Sync. Filter Noise	17 MVRMS Max.	9.7			
				15 Seam Circuit	2.10 to 2.60 VRMS	2.33			
				RES. PARAMETERS	0.1 Ohms Max.	0.043			
				1 Between Term.	LIMITS	0.051			

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78-222-27 (6/70)

TEST SUMMARY SHEET

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ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE NUMBERS	
Detector & Sync. Filter Module A-3		Raytheon Company		2606038 Rev. -		11-18-71		FROM	
SPEC.		MANUFACTURER		MANUFACTURER'S TYPE		DATE TEST BEGUN		TO	
2606038 Rev. -		Raytheon Company		2606038 Rev. -		8-3-71		N/A N/A	
LINE	TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN. MAX.	NO. SAMPLES TESTED	PASSED	REMARKS
17	II	72		Visual Inspection	3.3, 3.7, 3.8, 3.9	N/A	4	4	
18	I	81		Terminal Strength Test	3.5, 3.4	N/A	4	4	
19	II	82		Electrical Test	3.4	Listed Below	4	4	
				ELEC. PARAMETERS					
				1 Supply Current	15 MADC Max.	2.6			
				2 Supply Current	35 MADC Max.	13.9			
				3 Supply Current	15 MADC Max.	7.4			
				4 Supply Current	15 MADC Max.	7.7			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.1			
				6 Phase Adj. Diff.	9 to 19 K Ohms	8.2			
				7 Sync. Filter Output	2.75 to 8.75 VRMS	13.7			
				8 Sync. Filter Bandwidth	0.36 to 0.50 VRMS	3.30			
				9 R/L Output	6 to 12 Hz	0.438			
				10 U/D Output	0.55 to 0.95 VRMS	7.6			
				11 R/L Sw. Symetry	0.55 to 0.95 VRMS	0.79			
				12 U/D Sw. Symetry	0.4 MS Max.	0			
				13 Sync. Filter Noise	0.4 MS Max.	0			
				14 Seam Circuit	17 MVRMS Max.	9.8			
				RES. PARAMETERS	2.10 to 2.60 VRMS	2.33			
				1 Between Term.	0.1 Ohms Max.	2.40			
				End Of Group II Tests		0.045			
						0.049			

Four modules successfully passed the requirements of Q-1427 Group II

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71-382-P7 (6/70)

TEST SUMMARY SHEET

ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE NUMBERS	
Detector & Sync. Filter Module (A-3)		Raytheon Company		2606039 Rev. -		11-18-71		FROM TO	
SPEC.		MANUFACTURER		MANUFACTURER'S TYPE		DATE TEST BEGUN		N/A N/A	
2606038 Rev. -		Raytheon Company		2606038 Rev. -		8-3-71		N/A	
LINE	TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN. MAX.	NO. SAMPLES TESTED PASSED	REMARKS	
20	I	87		Visual & Mech. Insp.	3.9	N/A	4	Four modules submitted to Group III tests ser. #0209, 0211, 0255, 0258.	
21	I	92		Electrical Test	3.4	Listed Below	4		
				ELECTRICAL PARAMETERS	LIMITS				
				1 Supply Current	10 MADC Max.	2.6			
				2 Supply Current	30 MADC Max.	12.8			
				3 Supply Current	10 MADC Max.	7.1			
				4 Supply Current	10 MADC Max.	7.1			
				5 Det. Ampl. Gain	7.25 to 8.75 VRMS	8.2			
				6 Phase Adj. Diff.	9 to 19 K Ohms	14.5			
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	3.15			
				7 Sync. Filter Output	0.38 to 0.48 VRMS	0.43			
				8 Sync. Filter Bandwidth	7 to 11 HZ	7.4			
				9 R/L Output	0.65 to 0.85 VRMS	0.79			
				10 R/L Output	0.65 to 0.85 VRMS	0.79			
				11 R/L Sw. Symmetry	0.2 MS Max.	0			
				12 U/D Sw. Symmetry	0.2 MS Max.	0			
				13 Sync. Filter Noise	12 MVRMS Max.	9.4			
				14 Seam Circuit	2.20 to 2.50 VRMS	2.37			
				RES. PARAMETERS	LIMITS				
				1 Between Term. 7 & 12	0.1 Ohms Max.	0.045			
22	III	95		Resistance To Soldering Heat	3.5.2	N/A	2		
23	III	99		Storage	3.6.3	N/A	4		
24	III	105		Electrical Test	3.4	Listed Below	4		
				ELECTRICAL PARAMETERS	LIMITS				
				1 Supply Current	15 MADC Max.	3.0			
				2 Supply Current	35 MADC Max.	13.8			
				3 Supply Current	15 MADC Max.	7.9			
				4 Supply Current	15 MADC Max.	7.9			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.2			
				6 Phase Adj. Diff.	9 to 19 K Ohms	15.3			
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	3.10			
				7 Sync. Filter Output	0.36 to 0.50 VRMS	0.44			
				8 Sync. Filter Bandwidth	6 to 12 HZ	7.6			
				9 R/L Output	0.55 to 0.95 VRMS	0.79			
				10 U/D Output	0.55 to 0.95 VRMS	0.79			
				11 R/L Sw. Symmetry	0.4 MS Max.	0			
				12 U/D Sw. Symmetry	0.4 MS Max.	0			
				13 Sync. Filter Noise	17 MVRMS Max.	9.0			
				14 Seam Circuit	2.10 to 2.60 VRMS	2.38			
				RES. PARAMETERS	LIMITS				
				1 Between Term.	0.1 Ohms Max.	0.043			



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TEST SUMMARY SHEET

ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE NUMBERS	
SPEC.		Detector & Sync. Filter Module (A-3)		Raytheon Company		2606038 Rev. -		11-18-71	
2606038 Rev. -		MANUFACTURER		MANUFACTURER'S TYPE		DATE TEST BEGUN		FROM	
2606038 Rev. -		Raytheon Company		2606038 Rev. -		8-3-71		N/A	
LINE	TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN. MAX.	NO. SAMPLES TESTED PASSED	REMARKS	
25	III	108		Humidity Bake	3-6.5	N/A	4		
26	III	110		Electrical Test	3.4	Listed Below	4		
				ELEC. PARAMETERS	LIMITS				
				1 Supply Current	15 MADC Max.	2.9			
				2 Supply Current	35 MADC Max.	13.5			
				3 Supply Current	15 MADC Max.	7.8			
				4 Supply Current	15 MADC Max.	7.7			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.1			
				6 Phase Adj. Diff.	9 to 19 K Ohms	14.0			
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	3.15			
				7 Sync. Filter Output	0.36 to 0.50 VRMS	0.439			
				8 Sync. Filter Bandwidth	6 to 12 Hz	7.6			
				9 R/L Output	0.55 to 0.95 VRMS	0.79			
				10 U/D Output	0.55 to 0.95 VRMS	0.79			
				11 R/L Sw. Symmetry	0.4 MS Max.	0			
				12 U/D Sw. Symmetry	0.4 MS Max.	0			
				13 Sync. Filter Noise	17 MVRMS Max.	8.7			
				14 Seam Circuit	2.10 to 2.60 VRMS	2.38			
				RES. PARAMETERS	LIMITS				
				1 Between Term.	0.1 Ohms Max.	0.043			
27	III	113		Humidity	3-6.5	N/A	4		
28	III	115		Electrical Test	3.4	Listed Below	4		
				ELEC. PARAMETERS	LIMITS				
				1 Supply Current	15 MADC Max.	2.9			
				2 Supply Current	35 MADC Max.	13.5			
				3 Supply Current	15 MADC Max.	7.7			
				4 Supply Current	15 MADC Max.	7.6			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.2			
				6 Phase Adj. Diff.	9 to 19 K Ohms	14.8			
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	3.10			
				7 Sync. Filter Output	0.36 to 0.50 VRMS	0.438			
				8 Sync. Filter Bandwidth	6 to 12 Hz	7.6			
				9 R/L Output	0.55 to 0.95 VRMS	0.79			
				10 U/D Output	0.55 to 0.95 VRMS	0.80			
				11 R/L Sw. Symmetry	0.4 MS Max.	0			
				12 U/D Sw. Symmetry	0.4 MS Max.	0			
				13 Sync. Filter Noise	17 MVRMS Max.	8.7			
				14 Seam Circuit	2.10 to 2.60 VRMS	2.39			
				RES. PARAMETERS	LIMITS				
				1 Between Term.	0.1 Ohms Max.	0.043			



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TEST SUMMARY SHEET

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ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE NUMBERS	
Detector & Sync. Filter Module (A-3)		Raytheon Company		2606038 Rev. 4		11-18-71		FROM	
SPEC.		MANUFACTURER		MANUFACTURER'S TYPE		DATE TEST BEGUN		TO	
2606038 Rev. -		Raytheon Company		2606038 Rev. -		8-3-71		N/A	
LINE	TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN. MAX.	NO. SAMPLES TESTED	PASSED	REMARKS
29	III	118		Visual Inspection	3.3, 3.7, 3.8, 3.9	N/A	4	4	
30	I	123		Terminal Strength Test	3.5, 3.3	N/A	4	4	
31	III	124		Electrical Test	3.4	N/A	4	4	
				ELEC. PARAMETERS	LIMITS	Listed Below			
				1 Supply Current	15 MADC Max.	2.9			
				2 Supply Current	35 MADC Max.	13.6			
				3 Supply Current	15 MADC Max.	14.3			
				4 Supply Current	15 MADC Max.	7.7			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.1			
				6 Phase Adj. Diff.	9 to 19 K Ohms	8.2			
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	14.9			
				7 Sync. Filter Output	0.36 to 0.50 VRMS	3.15			
				8 Sync. Filter Bandwidth	6 to 12 Hz	0.440			
				9 R/L Output	0.55 to 0.95 VRMS	7.5			
				10 U/D Output	0.55 to 0.95 VRMS	0.80			
				11 R/L Sw. Symetry	0.4 MS Max.	0.79			
				12 U/D Sw. Symetry	0.4 MS Max.	0			
				13 Sync. Filter Noise	17 MVRMS Max.	0			
				14 Seam Circuit	2.10 to 2.60 VRMS	8.4			
				RES. PARAMETERS	LIMITS	2.38			
				1 Between Term.	0.1 Ohms Max.	0.046			
32	III	127		Flame Resistance	3.6.8	N/A	1	1	
				End Of Group III Tests					

Four modules successfully passed the requirements of Q-1427 Group III.

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TEST SUMMARY SHEET

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ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE NUMBERS	
Detector & Sync. Filter Module (A-3)		Raytheon Co.		2606038 Rev. -		11-18-71		FROM TO	
MANUFACTURER		MANUFACTURER'S TYPE		2606038 Rev. -		DATE TEST BEGUN		N/A N/A	
TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN. MAX.	NO. SAMPLES TESTED	PASSED	REMARKS	
30	I	130	Visual and Mechanical Insp.	3.9	N/A	4	4	Four modules submitted to Group IV tests Ser. #0250, 0286, 0294, 0300	
31	I	135	ELEC. PARAMETERS	3.4	Listed Below	4	4		
			1 Supply Current	10 MADC Max.	2.8				
			2 Supply Current	30 MADC Max.	12.8				
			3 Supply Current	10 MADC Max.	7.1				
			4 Supply Current	10 MADC Max.	7.3				
			5 Det. Ampl. Gain	7.25 to 8.75 VRMS	8.2				
			6 Phase Adj. Diff.	9 to 19 K Ohms	14.5				
			7 Det. Ampl. Output	2.75 to 8.75 VRMS	3.24				
			8 Sync. Filter Output	0.38 to 0.48 VRMS	0.438				
			9 Sync. Filter Bandwidth	7 to 11 Hz	7.5				
			10 R/L Output	0.65 to 0.85 VRMS	0.80				
			11 U/D Output	0.65 to 0.85 VRMS	0.80				
			12 R/L Sw. Symmetry	0.2 MS Max.	0				
			13 U/D Sw. Symmetry	0.2 MS Max.	0				
			14 Sync. Filter Noise	12 VRMS Max.	10.8				
			15 Seam Circuit	2.20 to 2.50 VRMS.	2.32				
			RES. PARAMETERS	0.1 Ohms Max.	0.044				
			1 Between Term. 7 & 12		0.047				
35	IV	138	Life Test 1st Profile (96 hrs)	3.6.9	N/A	4	4		
36	IV	139	ELEC. PARAMETERS	3.4	Listed Below	4	4		
			1 Supply Current	15 MADC Max.	2.6				
			2 Supply Current	35 MADC Max.	12.6				
			3 Supply Current	15 MADC Max.	7.0				
			4 Supply Current	15 MADC Max.	7.4				
			5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.0				
			6 Phase Adj. Diff.	9 to 19 K Ohms	14.0				
			7 Det. Ampl. Output	2.75 to 8.75 VRMS	3.30				
			8 Sync. Filter Output	0.36 to 0.50 VRMS	0.440				
			9 Sync. Filter Bandwidth	6 to 12 Hz	7.3				
			10 R/L Output	0.55 to 0.95 VRMS	0.80				
			11 U/D Output	0.55 to 0.95 VRMS	0.80				
			12 R/L Sw. Symmetry	0.4 MS Max.	0				
			13 U/D Sw. Symmetry	0.4 MS Max.	0				
			14 Sync. Filter Noise	17 VRMS Max.	9.6				
			15 Seam Circuit	2.10 to 2.60 VRMS	2.31				
			RES. PARAMETERS	0.1 Ohms Max.	0.045				
			1 Between Term.		0.048				

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TEST SUMMARY SHEET



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ITEM	ITEM			TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	CONTRACTOR'S TYPE		NO. SAMPLES TESTED	PASSED	REMARKS
	Detector & Sync. Filter Module (A-3)								2606038	Rev. -			
SPECS.			SPECS.			SPECS.			SPECS.			REMARKS	
2606038			2606038			2606038			2606038				
LINE	TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUE	MIN.	MAX.	NO. SAMPLES TESTED	PASSED	REMARKS		
37	IV	142		Life Test 2nd Profile (72 hrs)	3.6.9	N/A	N/A	N/A	4	4			
38	IV	143		Electrical Test	3.4	Listed Below			4	4			
				ELEC. PARAMETERS	LIMITS								
				1 Supply Current	15 MADC Max.	2.6	3.2						
				2 Supply Current	35 MADC Max.	12.6	13.8						
				3 Supply Current	15 MADC Max.	6.8	7.6						
				4 Supply Current	15 MADC Max.	7.3	8.0						
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.1	8.2						
				6 Phase Adj. Diff.	9 to 19 K Ohms	14.0	15.0						
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	3.30	3.45						
				7 Sync. Filter Output	0.36 to 0.50 VRMS	0.440	0.448						
				8 Sync. Filter Bandwidth	6 to 12 Hz	7.4	7.8						
				9 R/L Output	0.55 to 0.95 VRMS	0.81	0.82						
				10 U/D Output	0.55 to 0.95 VRMS	0.81	0.83						
				11 R/L Sw. Symmetry	0.4 MS Max.	0	0						
				12 U/D Sw. Symmetry	0.4 MS Max.	0	0						
				13 Sync. Filter Noise	17 MVRMS Max.	9.3	10.4						
				14 Seam Circuit	2.10 to 2.60 VRMS	2.31	2.40						
				RES. PARAMETERS	LIMITS								
				1 Between Term.	0.1 Ohms Max.	0.045	0.049						
39	IV	146		Life Test 3rd Profile (96 hrs)	3.6.9	N/A	N/A	N/A	4	4			
40	IV	147		Electrical Test	3.4	Listed Below			4	4			
				ELEC. PARAMETERS	LIMITS								
				1 Supply Current	15 MADC Max.	2.5	3.1						
				2 Supply Current	35 MADC Max.	12.5	13.9						
				3 Supply Current	15 MADC Max.	6.6	7.4						
				4 Supply Current	15 MADC Max.	6.9	8.0						
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.1	8.3						
				6 Phase Adj. Diff.	9 to 19 K Ohms	13.4	14.4						
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	3.35	3.55						
				7 Sync. Filter Output	0.36 to 0.50 VRMS	0.440	0.447						
				8 Sync. Filter Bandwidth	6 to 12 Hz	7.4	7.7						
				9 R/L Output	0.55 to 0.95 VRMS	0.81	0.82						
				10 U/D Output	0.55 to 0.95 VRMS	0.80	0.83						
				11 R/L Sw. Symmetry	0.4 MS Max.	0	0						
				12 U/D Sw. Symmetry	0.4 MS Max.	0	0						
				13 Sync. Filter Noise	17 MVRMS Max.	9.4	10.4						
				14 Seam Circuit	2.10 to 2.60 VRMS	2.31	2.40						
				RES. PARAMETERS	LIMITS								
				1 Between Term.	0.1 Ohms Max.	0.047	0.048						

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TEST SUMMARY SHEET

78-1315-01 10/701

ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE NUMBERS		
Detector & Sync. Filter Module (A-3)		Raytheon Company		2606038 Rev. -		11-18-71		FROM TO		
SPEC.		MANUFACTURER		MANUFACTURER'S TYPE		DATE TEST BEGUN		N/A N/A		
2606038 Rev. -		Raytheon Company		2606038 Rev. -		8-3-71		N/A N/A		
LINE	TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN.	MAX.	NO. SAMPLES TESTED	PASSED	REMARKS
41	IV	150		Life Test 4th Profile (72 Hrs)	3.6.9	N/A	N/A	4	4	
42	IV	151		Electrical Test	3.4	Listed	Below	4	4	
				ELEC. PARAMETERS	LIMITS					
				1 Supply Current	15 MADC Max.	2.5	3.2			
				2 Supply Current	35 MADC Max.	12.6	14.0			
				3 Supply Current	15 MADC Max.	7.0	7.7			
				4 Supply Current	15 MADC Max.	7.4	8.0			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.2	8.3			
				6 Phase Adj. Diff.	9 to 19 K Ohms	12.8	14.2			
				7 Sync. Filter Output	2.75 to 8.75 VRMS	3.33	3.55			
				8 Sync. Filter Bandwidth	0.36 to 0.50 VRMS	0.440	0.446			
				9 R/L Output	6 to 12 Hz	7.4	7.6			
				10 U/D Output	0.55 to 0.95 VRMS	0.80	0.82			
				11 R/L Sw. Symmetry	0.4 MS Max.	0	0			
				12 U/D Sw. Symmetry	0.4 MS Max.	0	0			
				13 Sync. Filter Noise	17 MVRMS Max.	9.3	10.5			
				14 Seam Circuit	2.10 to 2.60 VRMS	2.32	2.41			
				RES. PARAMETERS	LIMITS					
				1 Between Term.	0.1 Ohms Max.	0.048	0.049			
43	IV	154		Life Test 5th Profile (96 Hrs)	3.6.9	N/A	N/A	4	4	
44	IV	155		Electrical Test	3.4	Listed	Below	4	4	
				ELEC. PARAMETERS	LIMITS					
				1 Supply Current	15 MADC Max.	2.5	3.2			
				2 Supply Current	35 MADC Max.	12.2	14.0			
				3 Supply Current	15 MADC Max.	7.0	7.6			
				4 Supply Current	15 MADC Max.	7.0	7.6			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.1	8.3			
				6 Phase Adj. Diff.	9 to 19 K Ohms	13.5	14.4			
				7 Sync. Filter Output	2.75 to 8.75 VRMS	3.37	3.51			
				8 Sync. Filter Bandwidth	0.36 to 0.50 VRMS	0.440	0.448			
				9 R/L Output	6 to 12 Hz	7.4	7.8			
				10 U/D Output	0.55 to 0.95 VRMS	0.81	0.82			
				11 R/L Sw. Symmetry	0.4 MS Max.	0	0			
				12 U/D Sw. Symmetry	0.4 MS Max.	0	0			
				13 Sync. Filter Noise	17 MVRMS Max.	9.6	10.4			
				14 Seam Circuit	2.10 to 2.60 VRMS	2.32	2.41			
				RES. PARAMETERS	LIMITS					
				1 Between Term.	0.1 Ohms Max.	0.047	0.049			

POLY

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71-242-07 (8/70)

TEST SUMMARY SHEET

ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE NUMBERS		
Detector & Sync. Filter Module (A-3)		Raytheon Company		2606038 Rev. -		11-18-71		FROM		
SPEC.		MANUFACTURER		MANUFACTURER'S TYPE		DATE TEST BEGUN		TO		
2606038 Rev. -		Raytheon Company		2606038 Rev. -		8-3-7		N/A		
LINE	TEST GROUP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN.	MAX.	NO. SAMPLES TESTED	PASSED	REMARKS
45	IV	158		Life Test 6th Profile (72 Hrs)	3.6.9	N/A	N/A	4	4	
46	IV	159		ELEC. PARAMETERS	3.4	Listed	Below	4	4	
				1 Supply Current	15 MADC Max.	2.4	3.2			
				2 Supply Current	35 MADC Max.	12.5	13.9			
				3 Supply Current	15 MADC Max.	7.1	7.6			
				4 Supply Current	15 MADC Max.	7.3	7.9			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.1	8.2			
				6 Phase Adj. Diff.	9 to 19 K Ohms	13.8	14.8			
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	3.30	3.48			
				7 Sync. Filter Output	0.36 to 0.50 VRMS	0.440	0.448			
				8 Sync. Filter Bandwidth	6 to 12 Hz	7.4	7.6			
				9 R/L Output	0.55 to 0.95 VRMS	0.81	0.82			
				10 U/D Output	0.55 to 0.95 VRMS	0.81	0.83			
				11 R/L Sw. Symetry	0.4 MS Max.	0	0			
				12 U/D Sw. Symetry	0.4 MS Max.	0	0			
				13 Sync. Filter Noise	17 MVRMS Max.	9.5	10.3			
				14 Seam Circuit	2.10 to 2.60 VRMS	2.31	2.40			
				RES. PARAMETERS	0.1 Ohms Max.	0.047	0.051			
47	IV	162		Visual Inspection	3.3, 3.7, 3.8, 3.9	N/A	N/A	4	4	
48	I	171		Terminal Strength Test	3.5.3	N/A	N/A	4	4	
49	IV	172		ELEC. PARAMETERS	3.4	Listed	Below	4	4	
				1 Supply Current	15 MADC Max.	2.5	3.2			
				2 Supply Current	35 MADC Max.	12.5	13.8			
				3 Supply Current	15 MADC Max.	7.2	7.6			
				4 Supply Current	15 MADC Max.	7.3	8.0			
				5 Det. Ampl. Gain	7.00 to 9.00 VRMS	8.1	8.3			
				6 Phase Adj. Diff.	9 to 19 K Ohms	14.0	14.2			
				6A Det. Ampl. Output	2.75 to 8.75 VRMS	3.32	3.45			
				7 Sync. Filter Output	0.36 to 0.50 VRMS	0.438	0.448			
				8 Sync. Filter Bandwidth	6 to 12 Hz	7.4	7.8			
				9 R/L Output	0.55 to 0.95 VRMS	0.80	0.82			
				10 U/D Output	0.55 to 0.95 VRMS	0.80	0.82			
				11 R/L Sw. Symetry	0.4 MS Max.	0	0			
				12 U/D Sw. Symetry	0.4 MS Max.	0	0			
				13 Sync. Filter Noise	17 MVRMS Max.	9.1	10.2			
				14 Seam Circuit	2.10 to 2.60 VRMS	2.32	2.40			
				RES. PARAMETERS	0.1 Ohms Max.	0.047	0.051			
				Between Term.						



78-282 17 18/701

TEST SUMMARY SHEET

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ITEM		CONTRACTOR		CONTRACTOR'S TYPE		DATE TEST COMPLETED		SAMPLE NUMBERS		
Detector & Sync. Filter Module (A-3)		Raytheon Company		2606038 Rev. -		11-18-71		FROM TO		
SPEC.		MANUFACTURER		MANUFACTURER'S TYPE		DATE TEST BEGUN		N/A N/A		
2606038 Rev. -		Raytheon Company		2606038 Rev. -		8-3-71		N/A		
LINE	TEST GR. UP	DATA REF. PAGE	SPEC. REF. PAGE	TEST CONDITION	SPEC. LIMITS	MEASURED VALUES MIN.	MAX.	NO. SAMPLES TESTED	PASSED	REMARKS
50	I	28		Visual Inspection (Internal) End of Group IV End of Qual	3.3, 3.7, 3.8, 3.9	N/A	N/A	2	2	Two additional modules (unpotted) to be used as Qual. visual standards for workmanship. Four modules successfully passed the Group IV requirements of Q-1427.

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NOTES:

1. MODULE SHALL BE IN ACCORDANCE WITH AS1846, UNLESS OTHERWISE SPECIFIED HEREON.
- (A) 2. PREPARATION, PROCEDURES AND REQUIREMENTS FOR SOLDERING SHALL BE IN ACCORDANCE WITH WS6536 EXCEPT COMPONENT LEADS SHALL BE .030.
3. ELECTRICAL REQUIREMENTS: THE FOLLOWING REQUIREMENTS SHALL APPLY IN ADDITION TO THOSE SPECIFIED IN AS1846.
 - A. MODULE STATIC REQUIREMENTS SHALL BE AS SPECIFIED IN TABLE I.
 - B. MODULE OPERATING REQUIREMENTS, WITH MODULE INSERTED IN TEST CIRCUIT, FIGURE 1, SHALL BE AS SPECIFIED IN TABLE II.
- (B) CAUTION: SET SWITCHES S1, S2 AND S3 TO POSITION 1 (OFF), ALSO THE RESISTANCE OF THE DECADE BOX BETWEEN PINS 3 AND 23 SHOULD BE SET TO $15 \pm 1K$ OHMS, BEFORE INSERTING MODULE.
- C. FOR FREQUENCIES F_1 AND F_2 SEE DWG 2412395.
- D. TEST CIRCUIT INPUTS, UNLESS OTHERWISE SPECIFIED HEREON SHALL BE AS FOLLOWS:
 - (1) INPUT SIGNALS SHALL BE SET WITH POWER ACTIVATED.
 - (2) REFERENCE INPUT TO PINS 13 AND 15 SHALL BE $1.0 \pm .2$ VRMS AT $F_1 \pm .8\%$ WITH THE $0^\circ \pm 1^\circ$ PHASE APPLIED TO PIN 13 AND THE $90^\circ \pm 1^\circ$ PHASE APPLIED TO PIN 15.
- E. EQUIVALENT TEST EQUIPMENT MAY BE SUBSTITUTED FOR THOSE SPECIFIED.
4. PHYSICAL REQUIREMENTS: THE FOLLOWING REQUIREMENTS SHALL APPLY IN ADDITION TO THOSE SPECIFIED IN AS 1846.
 - A. COMPONENT LEADS, FEEDTHRU WIRES, AND ALL METAL CASE COMPONENTS WITHIN MODULE SHALL BE ISOLATED FROM EACH OTHER .020 MINIMUM.
 - (1) ALL COMPONENT LEADS AND ITEM 43 MAY BE INSULATED WITH ITEM 52 TO MAINTAIN REQUIRED CLEARANCE.
 - (2) ITEMS 36, 37 AND 39 MAY BE INSULATED WITH ITEM 56 TO MAINTAIN REQUIRED CLEARANCE.
 - (3) ITEM 38 MAY BE INSULATED WITH ITEM 54 TO MAINTAIN REQUIRED CLEARANCE.
 - (4) ITEM 49 MAY BE INSULATED WITH ITEM 55 TO MAINTAIN REQUIRED CLEARANCE.
 - B. BUILD-UP OF COPPER ON ITEMS 1 AND 2 SHALL NOT EXCEED .040 MAXIMUM.
 - C. ENCAPSULATED MODULE SHALL HAVE .060 MAXIMUM CORNER RADIUS, UNLESS OTHERWISE SPECIFIED HEREON.
 - D. ITEM 45 SHALL BE ASSEMBLED OVER LEADS OF ITEMS 36, 37, 38 AND 39; AND ITEM 44 SHALL BE ASSEMBLED OVER LEADS OF ITEM 49 PRIOR TO MOUNTING ON ITEMS 1 AND 2.
 - E. ITEM 43 SHALL MEET THE SOLDERABILITY REQUIREMENTS OF MIL-STD-202, METHOD 2088.
 - F. DIMENSIONS NOTED NEED NOT BE HELD AFTER SOLDERING.
5. ENCAPSULATING REQUIREMENTS:
 - A. AFTER SOLDERING, APPLY 2 COATS OF ITEM 48 TO SOLDERED ASSEMBLY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. THEN ENCAPSULATE MODULE TO CONFIGURATION SHOWN USING ITEM 46.

- (1) ENCAPSULATION SHALL BE CONTINUOUS AND FREE FROM CRACKS.
- (2) SURFACE IRREGULARITIES LARGER THAN .100 DIAMETER BY .050 DEEP REPAIRED USING ITEM 46.
- (3) ALL MODULE COMPONENTS, EXCEPT ITEM 3 PROTRUDING FROM SURFACE D COMPLETELY COVERED WITH ENCAPSULATING MATERIAL.
- (4) ENCAPSULATION FLASH AT BASE OF ITEM 3 PROTRUDING FROM SURFACE EXCEED .030 ABOUT ITEM 3, NOR PROJECT ABOVE SURFACE DATUM

6. SYMBOLS USED HEREON ARE DEFINED AS FOLLOWS:

- A. + INDICATES ANODE END OF DIODE OR POSITIVE END OF POLARIZED CAPA
- B. ● INDICATES COMPONENT LEAD WIRE.
- C. ● INDICATES FEEDTHRU LEAD WIPE.
- D. ■ INDICATES COPPER CIRCUIT NEAR SIDE.
- E. ■■■ INDICATES COPPER CIRCUIT FAR SIDE.
- F. ●● INDICATES PADS CONNECTED TO GROUND PLANE FAR SIDE.

7. REFERENCE DESIGNATIONS SHOWN ARE FOR REFERENCE ONLY AND NEED NOT APPEAR

8. PARTIAL REFERENCE DESIGNATIONS ARE SHOWN. FOR COMPLETE DESIGNATION, PF DESIGNATION WITH UNIT NUMBER OR ASSEMBLY DESIGNATION(S).

9. MARK, INDENT MOLD OR EMBOSS CHARACTERS SHOWN IN 1/16 MINIMUM HIGH CHARACTERS SHOWN.

A. MARKING SHALL BE ACCOMPLISHED USING A CONTRASTING COLOR OF ITEM 50

B. INDENT MOLD OR EMBOSSED CHARACTERS SHALL HAVE A .010 MAX. DEPTH ABOVE SURFACE DATUM -B- AS APPLICABLE.

C. MARKINGS SHALL BE LOCATED WITHIN 1/8 INCH ADJACENT TO LEAD.

10. MARK "30003-2606038" AND REVISION LETTER TO WHICH PART IS MANUFACTURED CHARACTERS, IN POSITION SHOWN, USING A CONTRASTING COLOR OF ITEM 50.

11. SEE NOTE 3 BEFORE INSERTING MODULE INTO TEST CIRCUIT.

(B) 12. MODULE OPERATION DURING LIFE TEST SHALL BE IN ACCORDANCE WITH FIGURE 1

13. FOR TEST 7 ONLY, PHASE LOCK THE SIGNAL AT PIN 3 WITH THE SIGNAL AT PIN 3 SIGNAL 45 ± 5 DEGREES AND TAKE MEASUREMENT.

14. BANDWIDTH IS MEASURED AROUND CENTER FREQUENCY.

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E	B	B	E
D	B	B	D
C	B	B	C
B	B	B	B
A	A	A	A
SHEET NO.1	SHEET NO.2	SHEET NO.3	SHEET NO.4

REVISION STATUS OF SHEETS

ITEM NO.	QTY REQD	CODE IDENT	PART NO. OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	NOTE
56	AP		2602187-2	INSULATOR		SEE NOTE 4A(2)
55	AR		2602187-4	INSULATOR		SEE NOTE 4A(4)
54	AR		2602187-5	INSULATOR		SEE NOTE 4A(3)
53	1		2602180-370	CAPACITOR		C31.
52	AR		AWG NO 20	INSULATION SLEEVING	MIL-I-22129	(COLOR OPT.)
51	AR		CLEAR	LACQUER	TT-L-26	
50	AR		SEE NOTES 9A AND 10	INK, MARKING	TT-I-558	
49	3		2602191-1	MICROELECTRONIC DEVICE		Z301
48	AP	13675	VEHS-100	CONFORMAL COATING		
47	1		2606046-54	RESISTOR		R337
46	AR		2602199	MOLDING COMPOUND		
45	9		2596349-1	PAD, TRANSISTOR		NOTE 4D
44	3		2596347	PAD, TRANSISTOR		NOTE 4D
43	AR		TYPE N-3 .0250 ± .0020	WIRE	MIL-STD-1276	
42	1		CK12BX150M	CAPACITOR	MIL-C-11015/20	C322
41	1		JANTXIN963B	SEMICONDUCTOR DEVICE	MIL-S-19500/117	1630

4

3

2

1

SHALL BE

ATUM -B- SHALL BE

DATUM -B- SHALL NOT
B- OVER .010 MAX.

CITOR, AS APPLICABLE.

ON PART.

PREFIX THE PARTIAL

ACTERS, IN POSITION

COVERED WITH ITEM 51.

OR HEIGHT, BELOW OR

IN 3/32 MINIMUM HIGH
AND COVER WITH ITEM 51.

2, SHEET 4, TEST 6.

N 13. PHASE SHIFT THE

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
		REPLACES 2605184		
	A4	13785, 4-27-71	8-11-71	AK
	B9	13832, 7-13-71	8-11-71	AK
	C2	14638, 6-30-71	8-31-71	AK
	D1	13883, 8-13-71	8-31-71	AK
	E	14679, 10-29-71	11-19-72	AK

D

A

B

C

A

B

D

B

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40	2	JANNA58	SEMICONDUCTOR DEVICE	MIL-S-19500/193	CR301, CR302
39	2	JANTX2N2432	SEMICONDUCTOR DEVICE	MIL-S-19500/313	Q303, Q306
38	2	JANTX2N2946A	SEMICONDUCTOR DEVICE	MIL-S-19500/382	Q304, Q305
37	3	JANTX2N2907A	SEMICONDUCTOR DEVICE	MIL-S-19500/291	Q302, Q307, Q309
36	2	JANTX2N2222A	SEMICONDUCTOR DEVICE	MIL-S-19500/255	Q301, Q308
35	2	2606046-13	RESISTOR		R332, R333
34	6	CSR136105KM	CAPACITOR	MIL-C-39003/1	C315, C313, C314, C316, C317
33	1	2602180-368	CAPACITOR		C301
32	1	2602180-364	CAPACITOR		C309
31	1	CSR13E225KM	CAPACITOR	MIL-C-39003/1	C323
30	1	CK14BR154K	CAPACITOR	MIL-C-11015/20	C303
29	1	CK12BX471M	CAPACITOR	MIL-C-11015/20	C308
28	2	CK12BX101M	CAPACITOR	MIL-C-11015/20	C321
27	2	CK13BX223M	CAPACITOR	MIL-C-11015/20	C318, C319
26	3	CK12BX103M	CAPACITOR	MIL-C-11015/20	C305, C306
25	1	CSR13F685KM	CAPACITOR	MIL-C-39003/1	C302, C307, C311
24	1	2602180-672	CAPACITOR		C304
23					C310
22	3	RCR076152JS	RESISTOR	MIL-R-39008/1	P334, R335, R336
21	2	2606046-14	RESISTOR		R303, R312
20	2	2606046-10	RESISTOR		R308, R309
19	1	2606046-60	RESISTOR		R327
18	1	2606046-59	RESISTOR		R320
17	1	RCR076511JS	RESISTOR	MIL-R-39008/1	R304
16	1	RCR076104JS	RESISTOR	MIL-R-39008/1	R316
15	9	RCR076103JS	RESISTOR	MIL-R-39008/1	R307, R310, R317, R318, R321, R322, R325, R326, R331
14	1	RCR076562JS	RESISTOR	MIL-R-39008/1	R338
13	2	2606046-40	RESISTOR		R328, R329
12	1	2606046-53	RESISTOR		R319
11	1	2606046-32	RESISTOR		R330
10	2	RCR076102JS	RESISTOR	MIL-R-39008/1	R311, R314
9	2	RCR076100JS	RESISTOR	MIL-R-39008/1	P313, R315
8	1	RCR206202JM	RESISTOR	MIL-R-39008/2	R305
7	2	2606046-52	RESISTOR		R302, R306
6	2	2606046-57	RESISTOR		R323, R324
5	1	2606046-20	RESISTOR		R301
4					
3	AP	2601E40	PIN, HEADER		
2	1	2606040	PRINTED CIRCUIT BOARD		A38
1	1	2606039	PRINTED CIRCUIT BOARD		A3A

C

B

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Z302, Z303

REFERENCE
DESIGNATION

ITEM NO.	QTY REQD	CODE IDENT	PART NO. OR IDENTIFYING NO.	DESCRIPTION OR DESCRIPTION	SPECIFICATION	NOTE	REFERENCE DESIGNATION
<div style="display: flex; justify-content: space-between;"> <div> <p>UNLESS OTHERWISE SPECIFIED</p> <p>DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES</p> <p>ANGLES ±</p> <p>FRACTIONS ±</p> <p>DECIMALS ±</p> <p>PART SHALL BE FREE OF BURRS</p> <p>BROKEN EDGES MAX</p> <p>FILETS R MAX</p> <p>SURFACE ROUGHNESS</p> <p>DO NOT SCALE THIS DRAWING</p> </div> <div> <p>NAVY WEAPONS CENTER</p> <p>CHINA LAKE, CALIF. 93555</p> <p>5512 1-7-71</p> <p>5516 1-7-71</p> <p>5523 1-7-71</p> <p>5551 1-7-71</p> <p>5571 1-7-71</p> <p>55032 1-7-71</p> <p>APPROVED FOR NAVAIR</p> </div> <div> <p>DEPARTMENT OF THE NAVY</p> <p>NAVAL AIR SYSTEMS COMMAND</p> <p>WASHINGTON, D.C. 20360</p> <p>NETWORK, DETECTOR AND</p> <p>SYNCHRONOUS FILTER A3</p> <p>NAVAIR DWG NO. 2606038</p> <p>SCALE NONE UNIT WT</p> <p>SHEET 1 OF 4</p> </div> </div>							
2606050	DL2606050						
NEXT ASSY	1320 ON						
APPLICATION							

2606038

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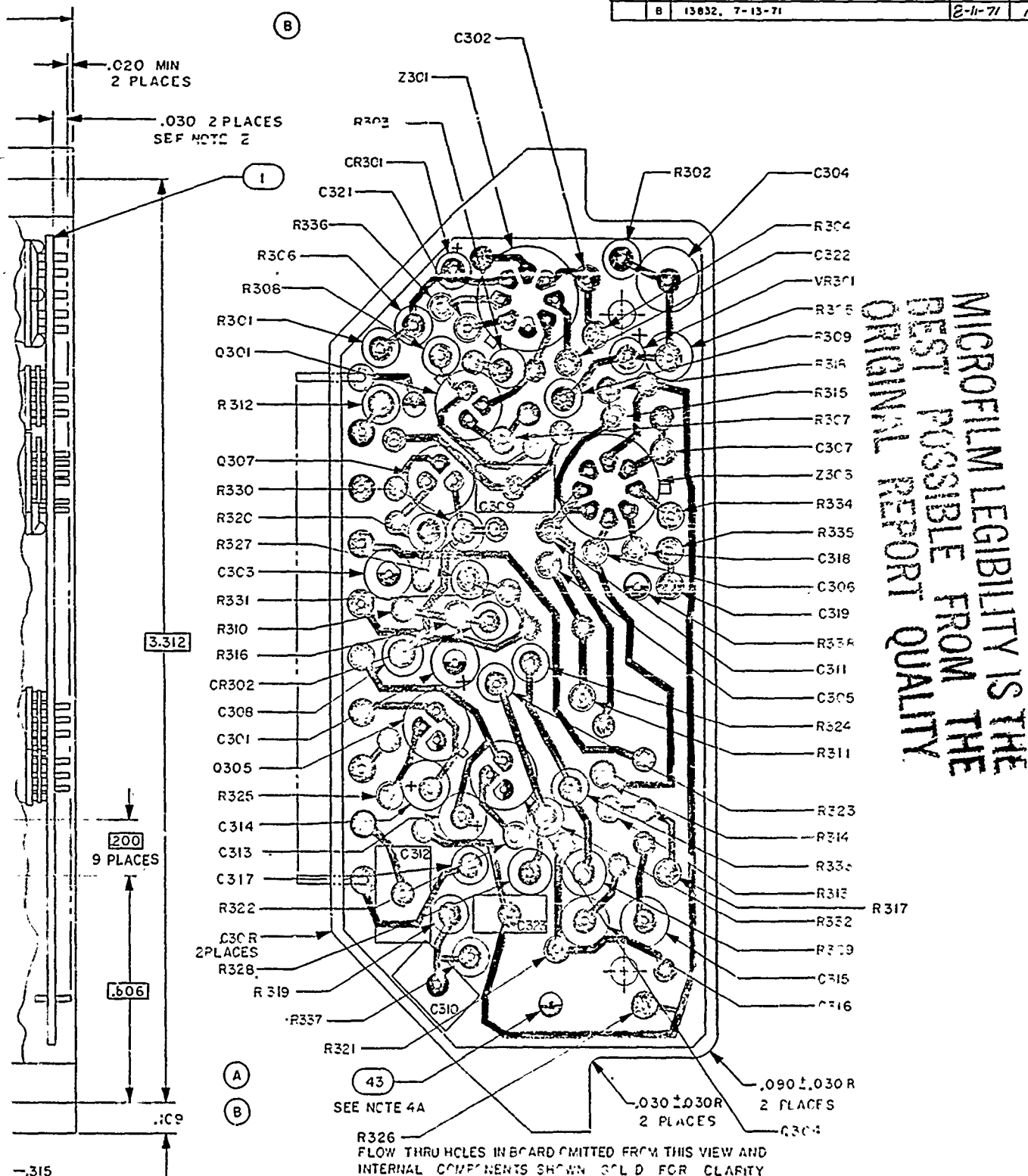
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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
		REPLACES 2605184		
	A2	13785, 4-27-71	8-11-71	/K
	B	13832, 7-13-71	8-11-71	/K

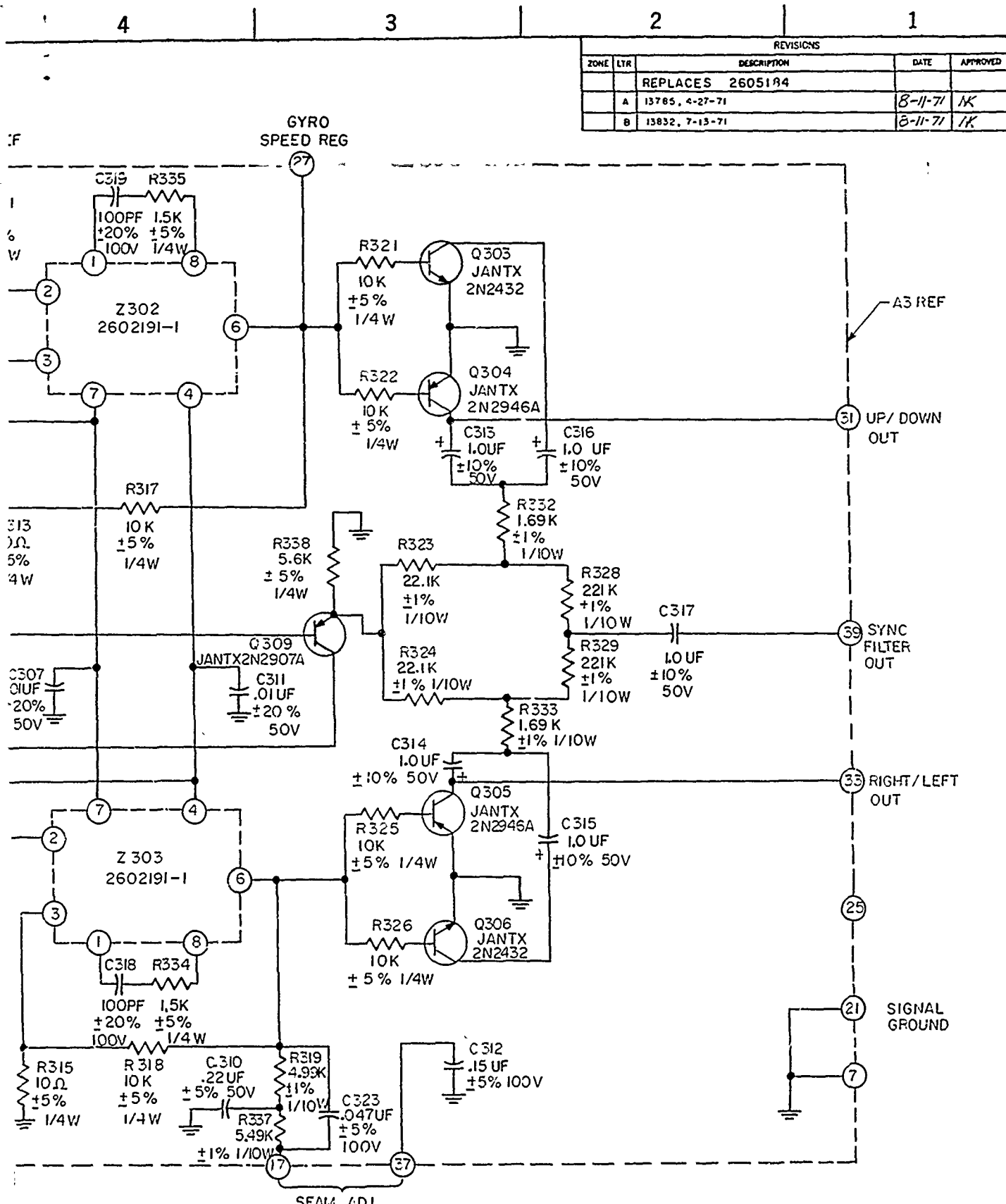


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STC, COOPER WIRES,
R CLARITY

		UNLESS OTHERWISE SPECIFIED		NAVAL WEAPONS CENTER CHINA LAKE, CALIF. 93555		DEPARTMENT OF THE NAVY NAVAL AIR SYSTEMS COMMAND WASHINGTON, D.C. 20360	
		DIMENSIONS ARE IN INCHES		5512		NETWORK, DETECTOR AND SYNCHRONOUS FILTER A3	
		TOLERANCES		5513			
		ANGLES $\pm 2^\circ$		5523			
		FRACTIONS \pm		5551			
		DECIMALS $\pm .010$		5571			
		PART SHALL BE FREE OF BURRS		55032		SIZE CODE IDENT NO. NAVAIR DWG NO	
		BROKEN EDGES		APPROVED FOR NAVAIR		D 30003	
		FILLET R MAX.		1971		SCALE 1/1 UNIT WT	
		SURFACE ROUGHNESS		1971		SHEET 2	
2606050 DL2606050		DO NOT SCALE THIS DRAWING		1971			
NEXT ASSY USED ON		INTERPRET DRAWING IN ACCORDANCE WITH MIL STD 1000		1971			
APPLICATION				1971			



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
REPLACES 2605194				
A	13785	4-27-71	8-11-71	IK
B	13832	7-15-71	8-11-71	IK

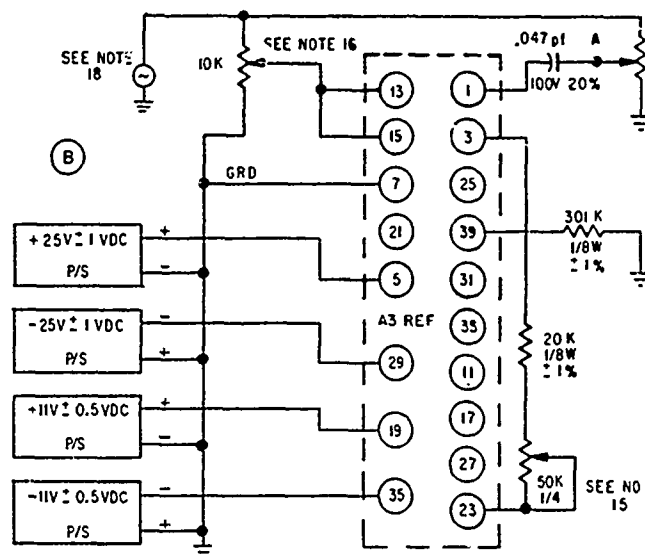
UNLESS OTHERWISE SPECIFIED		NAVAL WEAPONS CENTER CHINA LAKE, CALIF. 92535		DEPARTMENT OF THE NAVY NAVAL AIR SYSTEMS COMMAND WASHINGTON, D.C. 20360	
DIMENSIONS ARE IN INCHES		5512	✓	5516	✓
TOLERANCES		5523	✓	5551	✓
ANGLES ±		5571	✓	55032	✓
FRACTIONS ±		APPROVED FOR NAVAIR 27-1			
DECIMALS ±		1971			
PART SHALL BE FREE OF BURRS		SIZE			
BROKEN EDGES		CODE IDENT NO.			
FILLET R MAX		NAVAIR Dwg NO.			
SURFACE ROUGHNESS		D 30003			
DO NOT SCALE THIS DRAWING		2606038			
INTERPRET DRAWING IN ACCORDANCE WITH MIL STD 1000		SCALE NOTE UNIT WT SHEET 3			
2606050	DL2606050				
NEXT ASSY	USED ON				
APPLICATION					

2606038

MICROFILM LEGIBILITY IS THE
BEST POSSIBLE FROM THE
ORIGINAL REPORT QUALITY

TABLE I (SEE NOTE 3A)

TEST NO.	PARAMETER	BETWEEN TERMINAL	REQUIREMENTS	
			PRE-ENVIRONMENTAL	POST-ENVIRONMENTAL
1	RESISTANCE	7 AND 21	.1 OHM MAX	.2 OHM MAX



LIFE TEST CIRCUIT
FIGURE 2

TABLE II (SEE NOTE 3B)

TEST NO.	PARAMETER	TERM.	REQUIREMENTS		POSITION			REMARKS
			PRE-ENVIRONMENTAL	POST-ENVIRONMENTAL	S1	S2	S3	
1	SUPPLY CURRENT	5	10 MADC MAX. ABS	15 MADC MAX. ABS	2	1	1	
2	SUPPLY CURRENT	29	30 MADC MAX. ABS	35 MADC MAX. ABS	2	1	1	
3	SUPPLY CURRENT	19	10 MADC MAX. ABS	15 MADC MAX. ABS	2	1	1	
4	SUPPLY CURRENT	35	10 MADC MAX. ABS	15 MADC MAX. ABS	2	1	1	
5	AUD. AMPL. OUTPUT	11	$8.0 \pm .75$ VRMS	8.0 ± 1.0 VRMS	2	2	1	APPLY 500 ± 5 MV RMS TO PIN 1. SET FREQ. TO $F_2 \pm 0.8\%$.
6	PHASE ADJUSTMENT DIFFERENCE	BETWEEN 3 & 1	14 ± 5 K Ω	14 ± 5 K Ω	2	2	1	ADJUST FREQ. AT PIN 1 TO $F_1 \pm .8\%$ AND THE VOLTAGE LEVEL TO 250 ± 5 MVRMS. THEN SET THE RESISTANCE BETWEEN PINS 3 AND 23 FOR A PHASE READING OF 135 ± 3 .
6A	DET. AMPL. OUTPUT	3	5.75 ± 3.0 VRMS	5.75 ± 3.0 VRMS	2	1	1	SAME CONDITIONS AS TEST 6.
7	SYNC FILTER OUTPUT	39	$.43 \pm .05$ VRMS	$.43 \pm .07$ VRMS	2	3	1	ADJUST VOLTAGE TO OBTAIN $1.42 \pm .02$ VRMS AT $F_1 \pm .8\%$ AT PIN 3 (SEE NOTE 13)
8	SYNC FILTER BANDWIDTH	39	9 ± 2 Hz	9 ± 3 Hz	2	3	1	ADJUST FREQUENCY AT PIN 3 TO OBTAIN A .3dB BANDWIDTH AT PIN 39. SEE NOTE 14.
9	R/L OUTPUT	33	$.75 \pm .10$ VRMS	$.75 \pm .20$ VRMS	2	3	2	SET INPUT PIN 3 TO 1.0 ± 0.2 VRMS AT FREQ. $F_1 \pm 0.8\%$.
10	U/D OUTPUT	31	$.75 \pm .10$ VRMS	$.75 \pm .20$ VRMS	2	3	2	
11	R/L SWITCHING SYMMETRY	17	.2 MSEC MAX.	.4 MSEC MAX	2	1	1	MEASURE EACH HALF CYCLE OF THE SWITCHING WAVEFORM AND DETERMINE THE TIME DIFFERENCE BETWEEN THE TWO.
12	U/D SWITCHING SYMMETRY	27	.2 MSEC MAX	.4 MSEC MAX	2	1	1	MEASURE EACH HALF CYCLE OF THE SWITCHING WAVEFORM AND DETERMINE THE TIME DIFFERENCE BETWEEN THE TWO.
13	SYNC FILTER NOISE	39	10 MVRMS MAX	15 MVRMS MAX	2	1	1	MEASURE SYNC FILTER NOISE
14	SEAM CIRCUIT VOLTAGE	37	$2.35 \pm .15$ VRMS	$2.35 \pm .25$ VRMS	2	1	1	MEASURE SEAM VOLTAGE.
15	SEAM CIRCUIT PHASE	BETWEEN 15 & 37	$120 \pm 5^\circ$	$120 \pm 6^\circ$	2	1	1	PIN 15 SHALL BE REFERENCE VOLTAGE FOR PHASE READING.

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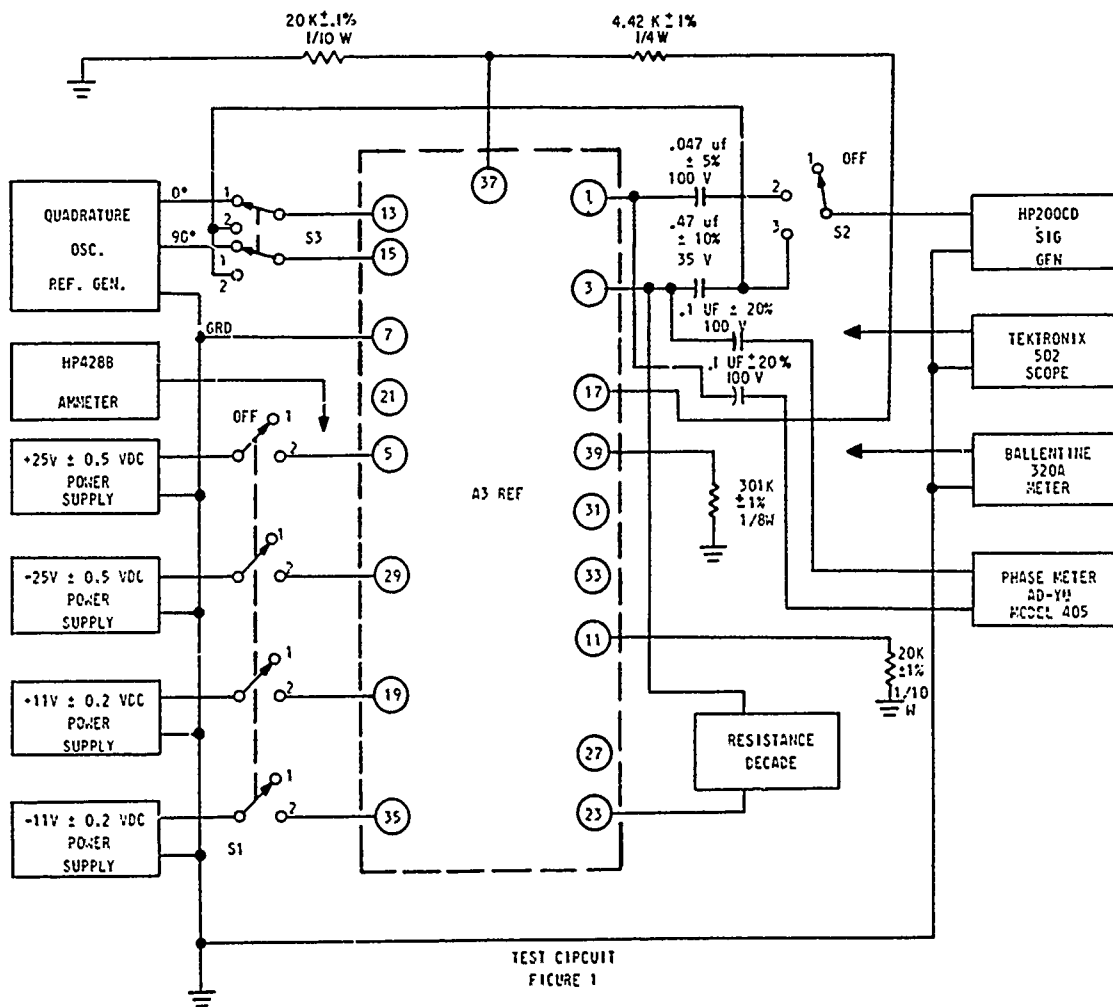
1

SEE NOTE
17

MICROFILM LEGIBILITY IS THE
BEST POSSIBLE FROM THE
ORIGINAL REPORT QUALITY

REVISIONS			
ZONE	LTR	DESCRIPTION	DATE
		REPLACES 2605184	
	B ₅	13832, 7-13-71	8-11-71
	D ₁	13883, 8-13-71	8-31-71
	E	14679, 10-29-71	1-19-72

15. SET RESISTANCE FROM PIN 3 TO PIN 23 FOR $40K \pm 5\%$.
16. SET RESISTANCE FOR $1.0 \pm .1$ VRMS AT PINS 13 AND 15.
17. SET RESISTANCE FOR $1.40 \pm .14$ VRMS AT POINT A.
18. SET VOLTAGE TO $5.0 \pm .5$ VRMS AT $f_1 \pm 2\%$.
 $Z_{OUT} \approx 600 \Omega$.



TEST CIRCUIT
FIGURE 1

2606050 DL2606050 NEXT ASSY USED ON APPLICATION		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ANGLES ± FRACTIONS ± DECIMALS ± PART SHALL BE FREE OF BURRS BROKEN EDGES MAX FILLETS R MAX SURFACE ROUGHNESS		NAVAL WEAPONS CENTER CHINA LAKE, CALIF. 93555 5512 5516 5523 5551 5571 55032		DEPARTMENT OF THE NAVY NAVAL AIR SYSTEMS COMMAND WASHINGTON, D.C. 20360 NETWORK DETECTOR AND SYNCHRONOUS FILTER A3	
		DO NOT SCALE THIS DRAWING INTERPRET DRAWING IN ACCORDANCE WITH MIL STD 1000		APPROVED FOR NAVAIR 27/10/71 John E. Shallen		SIZE CODE IDENT NO D 30003 2606038	
				SCALE NONE UNIT WT N/A SHEET 4			

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